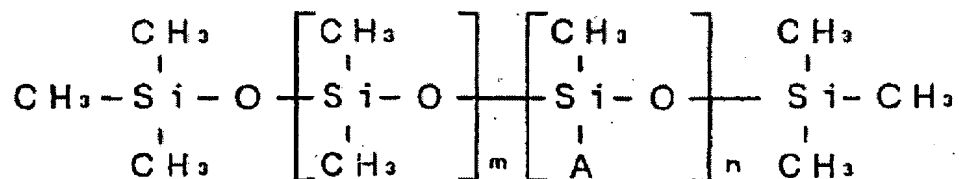


REMARKS

In order to expedite the prosecution of the present application and more particularly point out and distinctly claim the subject matter which Applicants regard as the invention, Claims 10-14 have been canceled and replaced by newly presented Claims 15-19 respectively. No new matter has been added.

Claims 3 and 10 have been rejected under 35 USC 102(b) as being anticipated by Appel. Claim 5 has been rejected under 35 USC 103(a) as being unpatentable over Appel. Claims 3 and 10 have been rejected under 35 USC 102(b) as being anticipated by Igarashi. Claim 5 has been rejected under 35 USC 103(a) as being unpatentable over Igarashi. Claims 3, 5 and 10-14 have been rejected on the ground of nonstatutory obviousness-type double patenting over Claims 1-4 and 8-10 of co-pending application Serial No. 10/540 617. Claims 3, 5 and 10-14 also have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting over Claims 1-21 of co-pending application Serial No. 10/546 345. Applicants respectfully traverse these grounds of rejection.

As explained previously, the instant invention is directed to a paper machine contamination preventive agent containing a modified silicone oil of formula (1), wherein sidechain A is substituted with an amino- or epoxy-containing organic functional group



The modified silicone oil of the present invention conveys the intrinsic releasability of a silicone oil and water-repellant properties onto a surface which contacts with a wet paper web to help prevent the transfer of foreign matter from the wet paper web to the surface. An improved property of the modified silicone oil of the present invention is its

fixability. Conventional silicone oils used in paper machines have good water-repellant and releasability properties but they tend to not adhere to the surface that they are applied to and are easily removed from the surface during use, with the attendant loss of their properties. In contrast thereto, the modified silicone oil of the present invention has a good adherence to the surface onto which it is applied and is capable of providing the surface with the advantageous properties associated with silicone oils. It is respectfully submitted that the prior art cited by the Examiner does not disclose the presently claimed invention.

The Appel et al reference discloses a detergent tablet composition which contains a silicone oil as a fabric conditioning agent. The silicone oil is disclosed as being a polysiloxane with aminoalkyl sidechains. However, the generic disclosure of a polysiloxane with aminoalkyl sidechains does not specifically disclose the modified silicone oil of formula (1) in the present claims and, at best, the Appel et al reference only presents a showing of prima facie obviousness under 35 USC 103(a) with respect to the contamination preventive agent of the present invention.

The Igarashi et al reference discloses fiber product-treating agents which can comprise a modified dimethyl polysiloxane oil having an organic group introduced into a hydroxyl group-containing dimethyl polysiloxane oil. Therefore, like the previously discussed reference, this reference, at best, has a generic disclosure which does not specifically show the modified silicone oil of formula (1) and, therefore, at best, only presents a showing of prima facie obviousness under 35 USC 103(a) with respect to the presently claimed invention.

Claims 3, 5 and 10-14 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting over the claims of co-pending applications 10/540 617 and 10/546 345. However, the claims of these applications only refer to a silicone oil. There is no specific disclosure of a

modified silicone oil in the claims, let alone a modified silicone oil of formula (1) as required by the present claims. Therefore, it is respectfully submitted that the claims of the copending applications do not even present a showing of prima facie obviousness under 35 USC 103(a) with respect to the presently claimed invention.

As discussed previously, objective evidence is presented in the present specification in which modified silicone oils according to the present invention and comparative silicone oils are tested. As discussed in the headings under "Evaluations" and "Summary of Experiments", with the sidechain-type modified silicone oil of Formula (1) of the present invention, the transfer of foreign matters to the canvas surface was slight and the blinding of the canvas was almost not caused in at least 10 days of service. In contrast thereto, when using an unmodified silicone oil, the blinding of the canvas started at substantially 10 days and the deposit of oils, foreign matter and the like to the outroll started during feeding for substantially 10 days. Moreover, a sidechain-type modified silicone oil had better results than a dimethyl polysiloxane based oil in both fixability to a roll and transfer inhibition capability of foreign matters from the wet paper web.

In order to further establish the unobviousness of the presently claimed invention, Applicants are enclosing herewith a Declaration Under 37 CFR 1.132. In the enclosed Declaration, additional tests are presented to illustrate the superiority of the modified silicone oils of the present invention over the SM8702 silicone oil disclosed in JP 07/292382 to Kuroda. The tests performed in the enclosed Declaration compare the differences in peel force between the dimethyl silicone oil of Kuroda and the amino-modified and epoxy-modified silicone oils of the present invention. As shown by the results contained in the enclosed Declaration, the modified silicone oils of the present invention had a superior fixability and attendant excellent releasability and

water-repellent functionality properties. This further establishes the patentability of the presently claimed invention over the prior art cited by the Examiner.

Reconsideration of the present application and the passing of it to issue is respectfully solicited.

Respectfully submitted,


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Encl: Declaration Under 37 CFR 1.132

136.07/05